

fact sheet

2003 Toxics Use Reduction Information Release

Each year, the Massachusetts Department of Environmental Protection (MassDEP) issues an annual report on the use of toxic chemicals in Massachusetts reported under the Toxics Use Reduction Act (TURA). The 2003 report shows continued progress by Massachusetts facilities in reducing toxics use and toxic byproducts relative to production levels.

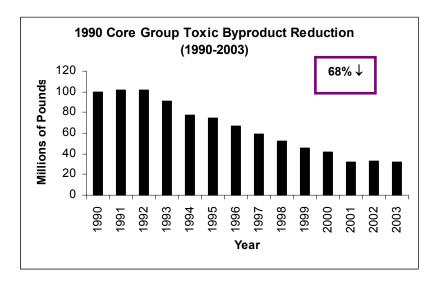
TURA progress is measured by using reported data (excluding trade secret data) normalized for changes in production and using a consistent set of chemicals and industries subject to reporting over a given period of time (referred to as a "Core Group").

In 2003, the **2000 Core Group** (industry categories and chemicals subject to reporting in 2000 and 2003) used 918 million pounds, or 93% of the toxic chemicals reported (i.e., 985 million pounds excluding trade secret data). Adjusting the data to account for an 11% decrease in production from 2000 to 2003, over that three-year period toxic chemical use among 2000 Core Group facilities remained level. However, the 2000 Core Group facilities reduced:

- toxic byproducts by 12%,
- toxics shipped in product by 11%,
- on-site releases of toxics to the environment by 26%, and
- transfers of toxics off-site for further waste management by 21%.

In 2003, the **1990 Core Group** (industry categories and chemicals subject to reporting in 1990 and 2003) used 573 million pounds, or 58% of the toxic chemicals reported (i.e., 985 million pounds excluding trade secret data). Adjusting the data to account for a 21% increase in production from 1990 to 2003, over that 13-year period the 1990 Core Group facilities reduced:

- toxic chemical use by 38%,
- toxic byproducts by 68%,
- toxics shipped in product by 61%,
- on-site releases of toxics to the environment by 92%, and
- transfers of toxics off-site for further waste management by 58%.



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In 2003, 647 facilities reported the use of 193 listed toxic substances under TURA. Including trade secret data, these facilities reported:

- 1.2 billion pounds of toxic substances used (up from 1.1 billion pounds in 2002),
- 107 million pounds of toxic byproduct (or waste) generated (up from 106 million pounds in 2002).
- 359 million pounds of toxics shipped in or as products (up from 343 million pounds in 2002).
- 9 million pounds of toxics released to the environment (up from 8 million pounds in 2002), and
- 35 million pounds of toxics transferred off-site for further waste management (up from 34 million pounds in 2002).

The increases from 2002 to 2003 in byproduct, releases to the environment, and transfers off-site for further waste management are due to the inclusion of combustion-related emissions reported by municipal waste combustors for the first time for 2003. If this new reporting were not included, the data would show decreases in these categories from 2002 to 2003.

2003 was the fourth year TURA facilities reported on chemicals now classified as persistent bio-accumulative toxic (PBT) chemicals by the U.S. Environmental Protection Agency (EPA) under the Toxics Release Inventory (TRI) Program. PBT chemicals are of special concern because they are highly toxic, remain in the environment for long periods of time, are not readily destroyed, and build up in the food chain. The PBT Hexachlorobenzene was reported for the first time in 2003.

TURA defines three types of toxics use: manufacturing (i.e., producing a toxic), processing (i.e., incorporating a toxic into a product), and "otherwise use" (i.e., all other uses). The reported data show that little chemical manufacturing occurred in Massachusetts (only 9% of total use). Most of the reported chemicals used (about 73%) were processed or incorporated into a product (such as plastics, paints, automotive parts, etc.). About 18% of chemical use was "otherwise use" attributed to uses ancillary to production processes, such as parts cleaning and waste treatment.

TURA requires reporting facilities to develop toxics use reduction plans that identify and evaluate opportunities to reduce the use of toxics and the generation of toxic byproducts. These plans must be updated every two years and approved by a state-certified toxics use reduction planner.

In addition to MassDEP's administration of reporting and planning requirements, the TURA program is supported by the Office of Technical Assistance (OTA) and the Toxics Use Reduction Institute (TURI). OTA provides non-regulatory technical assistance to facilities seeking to reduce the use of toxics, develops fact sheets and other technical guidance documents, supports the development of technology solutions by leveraging state and federal funding, and creates market-based incentives for qualifying TURA filers. TURI provides toxics use reduction education, training, and library services; supports research on cleaner materials and processes; and operates a laboratory for testing non-toxic or less-toxic cleaning alternatives.

The 2003 Toxics Use Reduction Information Release contains important chemical information from larger regulated industrial sources that is useful to the public, government, and industry. However, it is important to note that this information does not present the whole picture of chemical use in society, including emissions from cars and trucks, pesticides and fertilizers, and consumer use of products containing toxic chemicals.

MassDEP's 2003 Toxics Use Reduction Information Release is available at www.mass.gov/dep/bwp/dhm/tura. TURI also makes TURA data available on its website in a user-friendly way that is searchable by community, chemical, or company. See www.turi.org/turadata. For further information, please visit the web sites listed here, or call the MassDEP TURA program at 617-292-5711.

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